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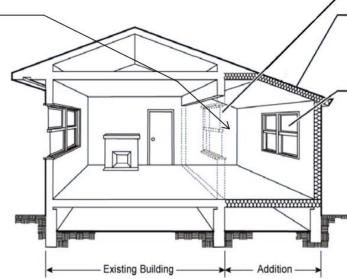
<u>Permit Center</u>: 408-615-2420 Email: PermitCenter@santaclaraca.gov

Automated Inspection Scheduling System: 408-615-2400

2016 CALIFORNIA ENERGY CODE RESIDENTIAL PRESCRIPTIVE REQUIREMENTS FOR ADDITIONS & ALTERATIONS

❖ Prescriptive Requirements for Additions < 1000 ft²

To provide consistency with existing wall alignment, extensions of the existing wall into the addition shall have R-15 for 2x4 walls and R-19 for 2x6 or greater walls.



Removed wall and window not included in the calculation.

Insulation requirements from Package A; unless addition is 700 ft² or less, then meet mandatory minimum roof/ceiling insulation

Fenestration area is limited based on the size of the addition:

- For additions ≤ 400 ft²: 75 ft² or 30% of CFA – whichever is greater -- for total glazing area; and 60 ft² for west-facing glazing.
- For additions > 400 ft² and ≤ 700 ft²: 120 ft² or 25% of CFA whichever is greater for total glazing area; and 60 ft² for west-facing glazing.
- For additions > 700 ft²: 175 ft² or 20% of CFA whichever is greater for total glazing area; and 70 ft² or 5% of CFA whichever is greater for west-facing glazing.

$A \le 400 \text{ ft}^2$

Package A exceptions allow:

- 75 ft² fenestration OR 30% of addition's CFA*
- Max west-facing fenestration 60 ft²

$400 \text{ ft}^2 < A \le 700 \text{ ft}^2$

Package A exceptions allow:

- 120 ft² fenestration OR 25% of addition's CFA*
- Max west-facing fenestration 60 ft²

$700 \text{ ft}^2 < A < 1000 \text{ ft}^2$

Package A exceptions allow:

- 175 ft² fenestration OR 20% of addition's CFA*
- Max west-facing fenestration 70 ft² OR 5%*

* Whichever is greater

	A ≤ 400 ft ²			
Component	Standard		Comment	
Ceiling Insulation	R-22 min		Mandatory Requirements	
Insulation in (N) Wall - Extension of (E) Wall	R-15 (2x4) R-19 (2x6)		150.2(a)1B	
(N) Wall Insulation	U = 0.051 or Less (R13+R8 or R19+R5)		Table 150.1-A	
Floor Insulation	Package A min (R-19 for Raised Floor)		Table 150.1-A	
Fenestration	U-factor 0.32	Max SHGC 0.25	Table 150.1-A	
Maximum Glazing Area	See Table above		150.2(a)1B	
Radiant Barrier	Package A (Required)		Table 150.1-A	

$400 \text{ ft}^2 < A \le 700 \text{ ft}^2$				
Standard		Comment		
R-22 min		Mandatory		
		Requirements		
R-15 (2x4) R-19 (2x6)		150.2(a)1B		
U = 0.051 or Less		Table 150.1-A		
(R13+R8 or R19+R5)				
Package A min		Table 150.1-A		
(R-19 for Raised Floor)				
U-factor	Max SHGC	Table 150.1-A		
0.32	0.25			
See Table above		150.2(a)1B		
Package A (Required)		Table 150.1-A		

❖ Roof and Ceiling Requirements for Prescriptive Additions (700 ft² < A < 1000 ft²)

	Option A	Option B	Option C
Roof Deck	Above deck continuous	Below deck insulation:	Non Required
Insulations 1,2	insulation: R6 (with air space), R8	R13 (with air space), R18 (no air	(NOTE: This attic requires
	(no air space)	space)	Ducts in conditioned space)
Ceiling	R38	R38	R30
Insulation	N30		
Duct Location	Attic allowed	Attic allowed	Condition Space

- 1. Roof deck insulation should be installed flush with the roof deck. Above deck insulation is applied as continuous insulation. Below deck insulation is installed in the cavities between trusses.
- 2. A designed air space may exist between the roof deck and the finishing roof material, triggering lower required insulation values.

Prescriptive Fenestration Requirements for Alterations

(Area of whole window, including frame)

Replace Exiting Only* (No Increase in Fenestration Area)

- Vertical fen. ≤75 ft² U-factor ≤0.40 SHGC ≤0.35
- Vertical fen. >75 ft²
 U-factor ≤0.32
 SHGC ≤0.25
- Skylights U-factor ≤0.55 SHGC ≤0.30

Added Fenestration $1ft^2 \le Area \le 75 ft^2$

❖ U-factor ≤0.32

SHGC ≤0.25

Total and west-facing area requirements do NOT apply

Alterations that add ≤ 16 sf new skylight area with a max U-factor of 0.55 and a max SHGC of 0.30 area do NOT need to meet the total fenestration area and westfacing fenestration area required

Added Fenestration Area ≥ 75 ft²

- **❖** U-factor ≤0.32
- **♦** SHGC ≤0.25
- **❖** Total area ≤ 20%
- ❖ West Facing Area≤ 5%

^{*}Applies even if a single window (including frame) is being replaced